

AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double brackets indicating deletions.

Listing of the Claims

1. (Currently Amended) A method of transmitting data packets, comprising:
assigning ~~first~~-data packets a transmission sequence number, the transmission sequence number indicating a sequence of transmission for the ~~first~~-data packets;
transmitting at least one of the ~~first~~-data packets to a destination device;
aborting the transmission of at least one of the data packets; and
~~receiving second data packets from the destination device, at least one of the second data packets indicating by transmission sequence number whether one of the first data packets has been received by the destination device; and~~
inserting an acknowledge sequence number in at least one of the transmitted ~~first~~-data packets, ~~based on results of the receiving step~~, the acknowledge sequence number being the transmission sequence number of a one of the aborted ~~first~~-data packets, ~~that has been received by the destination device as determined in the receiving step.~~
2. (Cancelled)
3. (Currently Amended) The method of claim 1-2, wherein the aborting step aborts the transmission of the ~~first~~-data packet when another ~~first~~-data packet having a higher priority class is ready for transmission.

4. (Original) A method of transmitting data packets, comprising:
 - assigning data packets a transmission sequence number, the transmission sequence number indicating a sequence of transmission for the data packets;
 - transmitting the data packets to a destination device;
 - aborting transmission of a data packet; and
 - inserting an acknowledge sequence number in at least one of the data packets, the acknowledge sequence number being the transmission sequence number of the data packet that was aborted.
5. (Original) The method of claim 4, wherein the aborting step aborts the transmission of the data packet when another data packet having a higher priority class is ready for transmission.
6. (Currently Amended) An apparatus for transmitting data packets, comprising:
 - a transmission sequence generator assigning transmission sequence numbers to first data packets, the transmission sequence number indicating a sequence of transmission for the first data packets;
 - a transmitter transmitting at least one of the first data packets to a destination device;
 - a scheduler instructing the transmitter to abort the transmission of at least one of the first data packets;
 - a receiver receiving second data packets from the destination device, at least one of the second data packets indicating by transmission sequence number whether one of the first data packets has been received by the destination device; and
 - an acknowledge sequence generator inserting an acknowledge sequence number in at least one of the first data packets based on second data packets received by the receiver, the

acknowledge sequence number being the transmission sequence number of a first data packet that has been received by the destination device as determined by the receiver, the acknowledge sequence generator inserting an acknowledge sequence number equal to the transmission sequence number for the aborted first data packet into one of the first data packets to be transmitted.

7. (Cancelled)

8. (Currently Amended) The apparatus of claim 6-7, wherein the scheduler aborts the transmission of the first data packet when another first data packet having a higher priority class is ready for transmission.

9. (Original) An apparatus for transmitting data packets, comprising:

a transmission sequence generator assigning data packets a transmission sequence number, the transmission sequence number indicating a sequence of transmission for the data packets;

a transmitter transmitting the data packets to a destination device;

a scheduler instructing the transmitter to abort transmission of a data packet; and

an acknowledge sequence generator inserting an acknowledge sequence number in at least one of the data packets, the acknowledge sequence number being the transmission sequence number of the data packet that was aborted.

10. (Original) The apparatus of claim 9, wherein the scheduler aborts the transmission of the data packet when another data packet having a higher priority class is ready for transmission.

11. (Currently Amended) A method of receiving data packets, comprising:

receiving data packets at a destination device from a source device, each data packet having a transmission sequence number, the transmission sequence number indicating a sequence of transmission for the data packets, and at least one of the data packets including an acknowledge sequence number, the acknowledge sequence number indicating that the source device considers the data packet having a transmission sequence number equal to the acknowledge sequence number was received at the destination device;

storing the received data packets in at least one buffer; and

outputting data packets in order of transmission from the buffer at least based on the transmission sequence numbers of the data packets and the acknowledge sequence number, so that a missing data packet having a transmission sequence number equal to the acknowledge sequence number is treated as having been output from the buffer.

12. (Cancelled)

13. (Currently Amended) The method of claim 11-12, wherein the outputting step further comprises~~includes~~:

providing a counter;

comparing a counter value of the counter with the transmission sequence numbers of the data packets stored in the buffer;

outputting, based on the comparison, a data packet having the same transmission sequence number as the count value;

incrementing the count value when the outputting step outputs a data packet; and

repeating the comparing, outputting and incrementing steps.

14. (Original) The method of claim 13, wherein the incrementing step increments the count value when the acknowledge sequence number equals the count value.

15. (Currently Amended) An apparatus receiving data packets, comprising:

a receiver receiving data packets at a destination device from a source device, each data packet having a transmission sequence number, the transmission sequence number indicating a sequence of transmission for the data packets, and at least one of the data packets including an acknowledge sequence number, the acknowledge sequence number indicating that the source device considers the data packet having a transmission sequence number equal to the acknowledge sequence number was received at the destination device;

at least one buffer storing the received data packets; and

control logic instructing the buffer to output data packets in order of transmission at least based on the transmission sequence numbers of the data packets and the acknowledge sequence number, so that a missing data packet having a transmission sequence number equal to the acknowledge sequence number is treated as having been output from the buffer.

16. (Cancelled)

17. (Currently Amended) The apparatus of claim 15~~16~~, wherein the control logic ~~comprises~~includes:

a counter; and wherein

the control logic compares a counter value of the counter with the transmission sequence numbers of the data packets stored in the buffer; instructs, based on the comparison, the buffer to output a data packet having the same transmission sequence number as the count

value; increments the count value when a data packet is output; and repeats the comparing, outputting and incrementing process.

18. (Original) The apparatus of claim 17, wherein the control logic increments the count value when the acknowledge sequence number equals the count value.